

WHAT IS CLAIMED IS:

1. A coating apparatus for removing edge pool formed on a wafer side surface of a coating film deposited on a wafer by edge rinse treatment using a rinse solution, comprising:

a mechanism in which the edge rinse treatment is performed using a rinse solution containing a mixture of solvents having different dissolving rates for dissolving the coating film.

2. The coating apparatus according to Claim 1,
wherein the dissolving rates vary in accordance with types of coating film, and the mixture of solvents minimizes an edge hump of the coating film.

3. The coating apparatus according to Claim 1,
wherein the mechanism comprises a flow adjust device for changing a ratio between the solvents contained in the rinse solution in accordance with the coating film.

4. The coating apparatus according to Claim 3,
wherein the ratio between the solvents contained in the rinse solution is adjusted using the flow adjust device in accordance with the dissolving rate for dissolving the coating film.

5. The coating apparatus according to Claim 1,
wherein the coating film is an organic antireflection film or a photoresist film.

6. The coating apparatus according to Claim 5,
wherein the solvents comprise isopropyl alcohol and polyethylene glycol monomethyl ether acetate.

7. A coating apparatus for removing edge pool formed on a wafer side surface of a coating film deposited on a wafer by edge rinse treatment using a rinse solution, comprising:

a mechanism in which the edge rinse treatment is performed using any

one selected from solvents having different dissolving rates for dissolving the coating film, the any one selected from solvents being used as the rinse solution.

8. The coating apparatus according to Claim 7,

wherein the dissolving rates vary in accordance with types of coating film, and the any one selected from the solvents minimizes an edge hump of the coating film.

9. The coating apparatus according to Claim 7,

wherein the mechanism comprises rinse nozzles for supplying the solvents having different dissolving rates for dissolving the coating film.

10. The coating apparatus according to Claim 7,

wherein the coating film is an organic antireflection film or a photoresist film.

11. The coating apparatus according to Claim 10,

wherein the solvents comprise isopropyl alcohol and polyethylene glycol monomethyl ether acetate.

12. A coating method for forming a coating film on a wafer and for removing for removing edge pool formed on a wafer side surface by edge rinse treatment using a rinse solution, the method comprising:

a mixing step of mixing solvents having different dissolving rates for dissolving the coating film, the solvents being used as the rinse solution.

13. The coating method according to Claim 12,

wherein the dissolving rates vary in accordance with types of coating film, and the mixing step is performed so that the rinse solution minimizes an edge hump of the coating film.

14. The coating method according to Claim 12,

wherein the coating film is an organic antireflection film or a photoresist film.

15. The coating apparatus according to Claim 14,

wherein the solvents comprise isopropyl alcohol and polyethylene glycol

monomethyl ether acetate.

16. A coating method for forming a coating film on a wafer and for removing for removing edge pool formed on a wafer side surface by edge rinse treatment using a rinse solution, the method comprising:

a selecting step of selecting any one of solvents having different dissolving rates for dissolving the coating film, the any one of solvents being used as the rinse solution.

17. The coating method according to Claim 16,

wherein the dissolving rates vary in accordance with types of coating film, and the selecting step is performed so that the rinse solution minimizes an edge hump of the coating film.

18. The coating method according to Claim 16,

wherein the coating film is an organic antireflection film or a photoresist film.

19. The coating method according to Claim 18,

wherein the solvents comprise isopropyl alcohol and polyethylene glycol monomethyl ether acetate.